Aesthetics in Gaming:
Postphenomenological Approaches to Understanding the Player-Avatar Relation in the Video Game Series *Mass Effect*

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Figures

The figures used are screenshots taken by the author. Their use is intended for educational purposes only. An email requesting permission of use was sent to both BioWare and Electronic Arts, yet no reply was received before the finalization of this paper. It is the author's understanding that their use would not infringe copyright as the paper in which they are used is non-profitable, and that they are used solely for educational purposes.

1. *Mass Effect 2* combat interface (*EA*, 2010). Page 65.
2. *Mass Effect 2* character customization interface (*EA*, 2012). Page 65.
3. Companions selectable for a mission in *Mass Effect 3* (*EA*, 2012). Page 66.

Abstract. This paper examines what types of relation that arise between the player and avatar in the video game series *Mass Effect*. Through a discussion of different phenomenological approaches, the paper aims to cast light on how human experience is mediated in the playing of third person roleplaying games with strong narrative components. Key concepts include the postphenomenological terms “composite intentionality” and “alterity relation”; terms used to describe how the player relates to the avatar and other characters in the game. The theory of Mark B. N. Hansen is used to explore the possibilities digital media gives for human experience. The concept of narrative self-understanding is further employed to account for the immersive, affective potential of the *Mass Effect* games. The body figures centrally throughout the paper, and is seen as central to the experience of playing video games in how it relates to digital media as a “center of indetermination” and as constitutive of the composite intentionality.

Part I

«Stories are lived before they are told – except in the case of fiction.»

(McIntyre, 1985)

Introductory remarks and formulation of problem

Prelude

Why did thousands of gamers form a grassroots movement to force video game developer BioWare to change the ending of the third, and final, game of their popular video game series *Mass Effect*? (Microsoft Game Studios: 2007, Electronic Arts: 2010 and 2012) What is it about this game series that could inspire so much enthusiasm and anger in fans, some of whom had been playing the games for nearly half a decade? These are the questions that inspired me to investigate the relation between players and video games with the *Mass Effect* series as my case study.

Research question

In this thesis I will try to make theoretical contributions to aid in understanding of how humans relate to video games. The process by which I will achieve the theoretical framework to do this requires considerable discussion. This thesis will therefore first and foremost be of a theoretical nature, although the theoretical base I establish will culminate in a case study. This will be an analysis of certain aspects of the *Mass Effect* video game series, with emphasis on two closely linked elements: 1) What kind of human-technology relation is established the player enters into through the interface of the computer during play, and 2) what sort of relation the player enter into when interacting with the avatar and other characters in *Mass Effect*. (Unless otherwise noted, «*Mass Effect*» will refer to the series as a whole in this paper.)

The first point will be handled antecedently to give a basis on which to tackle the second. This sequence of analysis is necessary, as the conversation I seek to establish between the theoretical approaches I make use of implies certain uncertainties about how humans relate to digital media. In trying

to find some points of contact and contention between the discourses, a clarification of key terms will be established, from which I will approach the more specific problematic of the relation between players and avatars in video games. To concretize what I will analyze in this relation, I will examine *how the player and avatar constitute each other as embodied agents*.

This co-constitutive effect is reliant upon several factors, and the scope of my analysis will therefore be broad. This approach necessitates a somewhat brief treatment of some subjects. I feel this is justified in that being inclusive both indicate the validity of my conclusion, as well as indicating possibilities for further research.

To give some further explanation as to what my research question entails, I will try to answer it by looking at how players' interaction with *Mass Effect* has a direct effect upon their felt agency in the situation of playing. This transformation of experience through interaction with *Mass Effect* as a technology, I will argue, is reliant upon both features of human phenomenology and concrete aspects of the game as a technology. Following this, I try to show is that neither human nor technology can claim autonomy in this relation. The player's interaction with *Mass Effect,* and the consequent affect felt by the player should rather be understood as constitutive of the co-construction of humans and technologies. As I will argue, the approach I have chosen to discuss this human-technology relationship avoids both technological determinist and social constructivist conclusions.

Now that I have established my research question and nuanced it, I will turn to a discussion of methodology and empirical considerations. This following chapter will also include a section where I try to give a straightforward account of what type of computer game *Mass Effect* is. It will also relate some of the controversy regarding the launch of the third game, the event which made me decide upon *Mass Effect* as my case for this study.

Empirical considerations

Concerns about privacy

This paper will mostly rely on the three *Mass Effect* games as basis for the analysis of a possible aesthetics of story-driven, third person video games. However, since I am also interested in investigating what it is about video games in general and *Mass Effect* in particular that makes gamers so passionate about them, I will draw on three other sources of data: Statements by the developers of the franchise, BioWare; reviews and articles by video game journalists; and perhaps most importantly, statements by fans about their experience with the games, and their communication and interaction with the former two groups. The quotes from developers and journalists should be rather unproblematic to use; they are made in the public domain by professionals who know they are addressing a global audience with making their statements available through outlets like YouTube, video game blogs, on public discussion boards and in iPad apps. When it comes to fans, the question becomes slightly more problematic, but with users employing aliases and posting in publicly available forums about non-confidential topics, I feel this constitutes adequate legitimacy to include them as reference points in my study.

Selection and focus

My investigation is largely theoretical. While I am engaging in the phenomenology of video games, my focus is not the experiences of gamers as such. I include quotes from a variety social media to highlight theoretical points, but they are in no way meant to be understood as exhaustive of the diversity of opinions and experiences available. What I try to do is rather establish a link between the controversy and the approach of my study: the (post)phenomenology of video games. The reason I've chosen to do this is twofold: Firstly, I want involve gamers and allow them to speak, considering a proper phenomenological study is bound to be enriched by looking to the lived experiences of gamers; I want to challenge my own experience of the games, considering my situatedness as an MA student and my theoretical grounding.

Secondly, from the sampling of video game philosophy, I believe turning to gamers can yield

valuable perspectives, not only to serve the purpose of the academic, but to bring to the fore the politics of video games (industry, gamers, journalism), which is crucial if one's departure is not merely as an observer, but stepping in as an actor in the related sociotechnical territory as well. Though a variety of constraints, most notably of time to finish this paper, have drawn my focus in the direction of a phenomenological analysis, my inclusion of an analysis of the controversy and gamer testimonies is a move to hint at the possibility for philosophers of technology to aspire to help shape the future of technological development. I am taking my cue here from Don Ihde, who stresses that «Philosophers should be in R & D positions.» To this end he proposes a pragmatic phenomenology, which may find its potential in postphenomenology, and actualization in my methodology, in which I try to connect the gaming[1] experience with the interaction between gamers, developers, producers and journalists.

Who speaks?

While, during my survey of online data, I have read a number of discussions on a variety of message boards prior to selecting an analysis of the *Mass Effect* games as my subject, I have inevitably been reminded of how messy reality can be. On the dialectic scale of messiness versus tidiness, the latter won out. The reason for this is to suit my goal, which is to illustrate the player-video game relation through a discussion of theoretical approaches of human-technology interaction centered on phenomenology and aesthetics of new media. As a result, the quotes I include from message board users are selective in the sense that I wish to focus on certain experiences, namely those of people who reacted negatively to the ending of *Mass Effect 3*. Within this category, I have chosen those who describe enjoyment of the game series up until the ending. There are players who enjoyed the ending, but they will not figure in my study as a discussion of why players reacted differently would require a different focus than the one I have chosen.

The selection of data, no matter it's limited role as illustrative, is to make ground for an analysis of *what*

1 To be clear. «gaming» means the action of playing a video game.

went wrong, and by the same token, *what was good*. In looking at the experiences of these users, the intensity of the negative reaction seems to be connected intimately with their (otherwise very positive) experience with the games up until that point. Looking at this connection opens the possibility to not only say something about *Mass Effect* in relation to its design, but opens up aesthetic and ethical aspects of video games as co-constructed technologies. This problematization, which is familiar within the STS tradition, seems to be lacking in video game studies, although my survey of the literature has not been exhaustive.

This approach is meant to further answer the call for video game studies to take the body seriously (Toft Nørgård, 2011). If a fuller understanding of video games is to be achieved, inquiries into how players shape their connection with video games through situated practices is necessary.

Language and gender

The gamers I have quoted will be referred to with gender-neutral pronouns, as I unfortunately have to forego issues of gender, orientation, race and localization due to constraints mentioned above. While there are some highly interesting issues concerning *Mass Effect* and sexuality, in particular concerning the introduction of same-sex relationship options, the theoretical body in my study will be ahistorical to allow for somewhat generalized conclusions, although I make no claim to total universality on this basis. There are however, some considerations concerning gender identity that must be resolved when using testimonies of internet users, as many operate with “nicknames” which render them practically anonymous.

Gender neutral pronouns

The way I will be referring to persons of unidentified or indeterminable gender in this paper, will be by using the gender neutral pronoun set constructed by Christine M. Elverson in 1975.[2] The set works as

2 The contest was held by the Chicago Association of Business Communicators, and the goal was for contestants to come up with replacements for the traditional feminine and masculine pronouns. See the following blog post for a newspaper scan discussing the contest and Elverson's (winning) entry: «The Rise of Transgender» by Guest Blogger in www.bilerico.com, 2011, July 12th.

follows: Subject: (th)ey; object: (th)em; possessive adjective: (th)eir; possessive pronoun: (th)eirs; reflexive: (th)emself. Not only is does this set provide one option out of many to challenge sexist language, it is also well suited for dealing with hypothetical persons. Another benefit for this study, is it's suitability for referencing internet users whose identity cannot always be established. In relation to these problems, this set of gender-neutral pronouns seems more elegant than the «s/he» or «he/she» solutions. Additionally, it doesn't exclude non-binary gender identities; meaning other genders than «man» or «woman». Lastly, as Commander Shepard can either be a man or a woman (the choice is up to the player), I won't have to choose one over the other when referencing em.

Mass Effect and the controversy over the ending

What kind of video game is *Mass Effect*?

Mass Effect is a third person perspective shooter (see *Figure 1* for a representation of this perspective) with strong roleplaying features. “Third person” refers to a certain kind of visual perspective in which the player’s implied position in the game space is situated slightly behind and above the avatar. By contrast, in first person games, the implied position is that the player is located within the body of the avatar, with the only visual aspects of the avatar available are eir arms.

The term “shooter” is somewhat self-explanatory, and implies a strong focus on combat with firearms. The term “roleplaying” is meant to convey that the player-avatar can upgrade equipment and abilities through exploring the game world and overcoming challenges. A certain distinction needs to be made here. While the “player-avatar” is what I refer to as the entity that occurs in the player and avatar acting together in play, in another sense there is the “playable character”, abstracted from praxis. I will use “avatar” to refer to something that can be controlled, while “character” will refer to a discrete entity abstracted from the player-avatar relation. The playable character will then change throughout the game by the efforts of the player-avatar.

Structure of the games

The gamer follows a central story with multiple sub-plots throughout all three games. The games make use of extensive cut scenes, which are pre-scripted cinematic sequences where the gamer is reduced to a spectator. In these sequences the player cannot usually interact with the game through the interface of mouse and keyboard. An exception to this was included in *Mass Effect 3.* In some cut scenes, the player was given the opportunity to click either the left or right mouse button in response to visual clues appearing on the screen, which would make Shepard act, and so change the cut scene. This feature will be discussed in section 2.

Interface

While all three games were released not only for the PC, but consoles like the Xbox 360 and Playstation 3 as well, I will refer to *Mass Effect* as a "video game", and talk of "video games" throughout this paper. This is both to avoid confusion of terms as well as to stay within the terminology that has been mostly accepted within video game studies, as the name of the field implies. Similarly, I will refer to the interface of the computer (mouse, keyboard, screen, speakers) to maintain consistency.

Development and the mythology of *Mass Effect*

November 20th 2007 marks the beginning of some very interesting journeys of which the *Mass Effect* video game trilogy is the center. The release of the first game took place on this date, and the world outside BioWare's development team and publisher Microsoft Game Studios was introduced to a science fiction themed, third-person roleplaying game. The story of the game beings in year 2183, 35 years after humanity discovered the technological relics of an ancient, alien civilization named as "Protheans" which allowed humanity to develop faster-than-light travel as well as perform instant jumps between star systems in the Milky Way. The main character of the story is the human protagonist, Commander Shepard, which is the avatar the player controls.

A comment on the term “control” is necessary at this juncture. As I will argue in a later section of my analysis of the game, the connection between player and avatar is both complex, and in terms of agency, shared. As mentioned earlier, this has given rise to the concept of the player-avatar. When referring to this cyborgian in some instance where Shepard *qua* Shepard, and not merely as the abstract “avatar”, is pronounced, I will be using the term “Player-Shepard.” This will be the most natural solution in contexts where it is also necessary to account for both the player's and Shepard's identity and agency.

Into the game

Through all three games, Player-Shepard must save humanity and the other sentient races of the galaxy from extinction. The threat comes in the form of the Reapers, a synthetic life form of superior intelligence and power whose purpose is to harvest and destroy all intelligent organic life. To quote the Reaper Sovereign who's encountered in the first game when Shepard and eir companions approach a holographic representation of it:

> “Organic life is nothing but a mutation, an accident. Your lives are measured in years and decades, you wither and die. We are eternal, the pinnacle of evolution and existence. [...] Organic civilizations rise, evolve, advance, and at the apex of their glory they are extinguished. [...] Your civilization is based on the technology of the Mass Relays, our technology. By using it, your society develops along the paths we desire. We impose order on the chaos of organic evolution. You exist because we allow it, and you will end because we demand it.” (Mass Effect, 2007, my transcription)

The scene is set for an epic journey in which Shepard and eir companions must eliminate the Reaper threat to save advanced organic life forms such as humanity, and thus be the first “cycle” of advanced civilizations to prevent this holocaust that, we are told, has happened roughly every 50,000 years for an eon of time. The Mass Relays the Reaper speaks of is the technology which allows for instant jumps across thousands of light years, dating to around 50,000 years before the events of the time the

story of *Mass Effect* takes place, which would be around the same time the Prothean civilization was extinguished by the Reapers. Shepard thus figures as a hero in this story, although the player may choose to be ruthless or benevolent in choosing how to approach saving the galaxy.

Acclaim and criticism

The question of design and use figures quite explicitly in *Mass Effect*, with the Mass Relays being an example. This problematic is also prominent in the reception of the game series by customers. After having enjoyed great commercial success for the series in addition to widespread critical acclaim,[3] something happened with the third and last installment of the series: The ending did not sit right with players. The reaction not only made mainstream news outlets, but was widely reported on by big video game blogs like IGN and Kotaku. Dissatisfied and angry players took to the discussion boards of these and other gaming sites to express their feelings and demands towards developer BioWare. Some of these discussion boards, especially BioWare's own, would become centers of a grassroots movement with the goal to have the ending changed. BioWare eventually delivered on this, and released a downloadable content pack titled *Mass Effect 3: Extended Cut* (EA, 2012), something which surprised industry commenters (Tassi, 2012). The fact that BioWare listened to the part of its customer base that was unsatisfied is interesting, as is the way players organized their protest. These themes however, fall without the scope of the current study, but are worthy of further inquiry. I will instead focus on the game as it was before the release of this “fixed” ending.

To approach some explanation of the reaction was this strong, an investigation of one of the reasons for the success of the series in necessary; what I will call “emotional investment through influence.” This refers to the effects of the player-avatar relation and how the corresponding entity must make choices that influence how the story advances. This aspect of choice in turn might be part of why players experience such a strong emotional investment. I want to clarify that I do not intend to

3 http://www.gamerankings.com/pc/944902-mass-effect/index.html, http://www.gamerankings.com/pc/944906-mass-effect-2/index.html , http://www.gamerankings.com/pc/995487-mass-effect-3/index.html

engage in psychology, but aim to make some philosophical observations about the player-avatar relationship. These observations might help make sense of how this emotional investment is achieved. An account of this will be proposed in the analysis undertaken in the third part of this study.

Choosing your story

The *Mass Effect* games revolve around a tight narrative, but allow the player[4] to make choices which influence how this narrative unfolds and develops, with choices taken in the first game having a considerable impact on story arcs and character relations even in the third game. Executive producer for the series Casey Hudson admitted in an interview that the decision to involve the player's choices on such a fundamental level would prove to be a bigger challenge than they had expected (Keighley, 2012). Still, all three games were developed on the premise that the player would influence the story and the universe they act in. It was however, this exact feature which would lead to become one of the biggest video game controversies in the history of the genre (Fahey, 2012). While *Mass Effect 3*, released on March 6th (North America), met with the same praise from critics as the two previous games, as players who bought the game early on finished their approximately 30 hour first play through of the game, a massive outcry of discontent and anger would flood message boards and social media.

The grassroots movement

Shortly after the first few players finished the third game, the internet would start lighting up with anger about the ending of the game. Add a few days, and many more of those who cannot afford to rush through 30 hours of gameplay in a couple of days started to join what would become a massive outcry. There are a number of opinions as to what exactly made the ending bad, but most of them seem to fall into four categories: 1) The player felt eir choices throughout the game were insignificant

[4] I'm using the term «player» here, as opposed to «player-avatar», to emphasize the importance of player participation.

when it came to how the ending played out; 2) that there was no meaningful set of choices facing the Player-Shepard in the final decision to be made at the ending; 3) that a lot of plot holes were left, and; 4) players wanted closure, most importantly in regards to what happened to Shepard's companions and the galaxy at large.

There are many variations within all four categories, but generally the sentiment seemed to be that players who vocalized their discontent felt confused and angry about an ending that did not give them what they needed in order to achieve catharsis and closure. The third and fourth categories could be seen as effects of "not getting what you wanted,"[5] but the former two do not, since they are concerned with effects of active participation, which are unique to video games as a genre.

What is interesting about the weeks that followed is not just the creativity of fans in creating their own endings and sharing them with each other through a variety of media, but also the criticism the dissenters faced from virtually all the biggest gaming journalist outlets. "Gamer entitlement" became a buzzword used by both journalists and users of message boards to criticize the protesters.[6] Despite this criticism affecting their own readership, some journalists did not shy away from voicing sharply formulated criticism.

Why *Mass Effect*?

What I find to be the most interesting feature of *Mass Effect* is the player's relation with the avatar, and the social interaction with the other characters in the game. How *Mass Effect* affects us during play may be understood through looking at how humans form their self-understanding through constructing narratives, in which agents figure centrally. The relevant agents will be the player-avatar and the other characters in the game. This feature of narrative will be analyzed in connection to the story-driven aspect of *Mass Effect*, and how the player is forced to make moral choices and interact with other characters that function as

[5] Although I hold this interpretation to be highly contestable as it potentially disregards the lived experience of the players involved.
[6] See eg. Parker (2012), Kain (2012), and especially Moriarty (2012).

agents.

As I stated in the prelude, the controversy which followed the release of the final game in early 2012, *Mass Effect 3* is what inspired me to choose the series as my case study. There are many video games similar to *Mass Effect*, but few have inspired the same kind of response from players. This makes *Mass Effect* interesting as a subject of study in two ways: First, the response indicates that players cared enough about the games to voice their concern over its ending, indicating that *Mass Effect* has features which are both qualitatively good, and that something at the same time went wrong. Secondly, due to the scale of the interest over the series and its ending, an inquiry into how players relate to the game could justifiably be said to be of interest to parts of the public.

Before I begin the discussion and presentation of the theory I have used, I will make a few distinctions concerning the goals of the thesis: As the video game as a medium is heterogeneous, with a variety of genres, not all of the conclusions I draw in this paper will be true of all video games, not even of all that feature a humanoid avatar, as *Mass Effect* does. My concern is first and foremost to analyze *Mass Effect*. While some insights gleaned could very well hold true for other video games, this will be of secondary concern, although it will be necessary to discuss some aspects of video games in general for thereby to relate them to *Mass Effect* specifically.

Part II

Preliminary notes on theory

Structure of chapter

In this chapter I will present the theory I will be using. I have structured the chapter as follows: First I will present the four theoretical approaches that inform my study. For each theoretical approach, I will say something about 1) which tradition it belongs to, 2) what theoretical aspirations it holds, and 3) in what respect it relates to the field of Science and technology studies (STS) scholarship. This latter point warrants some further explanation: While some of the theory is firmly rooted in the STS tradition, such as

postphenomenology, some are situated in other fields. I will argue that they are highly relevant for a STS study. By introducing these theories into a STS thesis, I hope to contribute to the field. This contribution might be useful in doing an analysis of computer gaming within the framework of STS. Computer games have been given very little attention in the field of STS so far, which is why I hope to complement traditional STS approaches with otherwise situated theory. As a result, insights into the human-technology relations present in computer gaming might be more readily be theorized. I will argue that there are significant overlaps in terms of approach, methodology and theoretical aspirations of STS and the other theoreticians I employ.

Parallel with presenting the theory I will discuss how I will be using the different frameworks in my thesis. This point will involve discussing a) what parts of the theories I see as applicable for my empirical case, and b) in what respects I plan to expand or make modifications upon the theory.

A closing discussion of this chapter will focus on comparing the theories, although only briefly. I have chosen to let the theories interact with each other most prominently in the analyses itself, as it is in application that they seem to converse most fruitfully.

I will present the theories in the following order: STS, video game studies, the phenomenology of new media by Mark B. N. Hansen, the postpheomenology of Peter-Paul Verbeek and Don Ihde, and finally the concept of narrative self-understanding by Dan Zahavi. Rikke Toft Nørgård will be introduced in the analyses, as her theoretical contribution functions as an auxiliary to Hansen. I will also note that video game studies, Zahavi will figure less prominently in this thesis on account that he informs a minor discussion, and will therefore be treated in a briefer fashion than Hansen and Verbeek/Ihde.

In what follows, I will give a brief account on how I understand STS.

Theory: STS

As a multidisciplinary field, being concise about what STS is is challenging. However, there are a few traits that seem to run through prominent works done in the field, which I will discuss.

Actor-network-theory (ANT) has undoubtedly been, and continues to be, one of the most influential directions within the discipline. The concepts of blackboxing, a focus on symmetry in analysis and repositioning of sources of agency are what I identify as some of the main themes relevant for my juxtaposition of STS with my selected theory that isn't specifically named as STS.

In particular, the discussion in ANT, and STS generally, about agency is relevant in how it relates to my study. In trying to overcome the subject-object dichotomy of modernity, Bruno Latour, one of the founders of ANT, has sought to develop a methodology which values non-human entities as actors, or *actants*, a term borrowed from the field of semiotics. Comparably, the same project is undertaken in postphenomenology, although with emphasis on human experience of the proposed ontology of agency stemming not from humans alone, but from complex relations between humans and technology, of which minute parts have been found to be worthy of consideration as being actors[7] in their own right. It is particularly this preoccupation with agency and its relative distribution in human-technology relations that I find engaging in STS.

What I have outlined is a very crude representation of STS and ANT, and other approaches such as SCOT might very well be interesting in an analysis of video games and their development, but that is outside the scope of the present undertaking. It is the inclination of STS to uncover the complexity of human-technology relations that has inspired the combination of theories in the present study. I will elaborate further on the relationship between ANT and phenomenology in the section on postphenomenology. Now, I will turn to video game studies.

Video game studies: "Ludology"

Serious academic treatment of video games has a relatively short history, with some of the first work being done in the mid 1990's. At this time though, video games were largely analyzed as being fundamentally *narrative*, borrowing the conceptual tools of literature studies. Video game researcher

[7] I will follow the postphenomenological terminology and use the terms «actor» and «agent».

Gonzalo Frasca sought to change this perception of video games with introducing the term “ludology” in a 1999 article, where “ludus” is the Latin equivalent to «game», proposing that there is something particular about video games that cannot be grasped by traditional approaches developed for studies of literature. While “ludus” is a term well suited for explaining the game*ness* of video games, I will not make much use of it as it is not so much the mechanisms of rules and goals, defining of games, I am interested in. Rather, it is the embodied relation of gamer and video game as technology, and how this relation affects the player that will be my focus. It has to be mentioned though, that together with fellow early video game researcher Espen Aarseth, Frasca set a valuable precedent in deterritorializing video games and help establish a proper academic milieu that until then had been largely fragmented.

Video game research as such is still a rather new field in academia, and there is still room for a variety of approaches and methodologies to be applied and tested. There have been calls for the establishment of a defined disciplinarity however (Mäyrä in Perron and Wolf, 2009), which I hope the discussion in this paper might contribute to. I have yet to see any comprehensive analyses of video games performed with the conceptual tools Mark B. N. Hansen (with the exception of Danish video game researcher Rikke Toft Nørgård) and postphenomenology. Both have developed useful theoretical frameworks for dealing with digital media and human-technology relations. Thus I hope my selection and use of these theoretical frameworks may contribute to video game studies as well as STS.

Mark B. N. Hansen and the phenomenology of new media: Introduction

Media theorist Mark B. N. Hansen shares many of the same concerns on relations between humans and technology as is seen in STS. Hansen does give some primacy to the human in the relation to technology, and may as such be seen not to attempt a symmetrical analysis of human-technology relations, as is the case with Latour and writers in the ANT tradition. His analysis of digital media is however

methodologically similar to that of Don Ihde's and fellow postphenomenologist Peter-Paul Verbeek's work. Latour has explicitly stated that he believes there can be no merge between ANT and postphenomenology due to the valorization of human agency by the latter discipline (Latour, 2005, 61, footnote 67). This view however, is contested in the STS literature, and will be given further treatment in the section on postphenomenology. Concerning Hansen, the same objection could be raised on behalf of ANT. As I propose to show however, the phenomenological framework Hansen develops for analyzing the relations between humans and digital media can be reconciled with the postphenomenological tradition.

Hansen: Outline and discussion of theory

Working in the field of media studies, Hansen has done innovative work in theorizing about digital media art. With his revamping of the phenomenological frameworks of philosophers Henri Bergson and Maurice Merleau-Ponty, Hansen offers new ways to theorize about human relations with digital technologies. This makes him highly relevant as a resource for STSers who wish to examine digital technologies such as video gaming. In particular, Hansen is interested in looking at new media art, and how contemporary efforts in this field might be understood through a phenomenology that takes into account the close relation between humans and technologies. While phenomenology is the main influence in Hansen's work, he draws upon a diversity of academic disciplines, ranging from neuroscience to Science studies.

Following a presentation of his main arguments, I will relate them to my investigation in this thesis, and elaborate on how Hansen can be seen as a legitimate choice for a STS study, given that he shares many of the same concerns and assumptions of the discipline. First, however, I will look at Hansen's two main theoretical influences: Henri Bergson and Maurice Merleau-Ponty, and how they play into his thinking around human-technology relations. Hansen's use of Bergson will be given the most weight. This presentation of Hansen's theoretical influences is made to facilitate an understanding of his position on agency, subject-object and how these themes figures into human relations with digital media technologies.

The phenomenology of Henri Bergson and Maurice Merleau-Ponty

Bergson

In this section, an account of Bergson's theory of perception will be given. It is not meant to be exhaustive, and I will only occupy myself with presenting the parts of his theory that figure centrally in Hansen's work. The goal is to give some insight into what tradition Hansen works out of, and what consequence this has for his relevance in a STS study. The concepts I will be focusing on are Bergson's conception of the "image" in human perception, and his critique of cinema as a format unsuited to represent reality.

Hansen's reworking of Bergson is carried out in the first volume of a planned trilogy on phenomenology and new media. In this first volume, *New Philosophy for New Media* (2004), Hansen argues that Bergson's account of how we as humans select only the images that are of interest to us from the «world of images» (objective, material reality) needs an update.

Bergson on human perception and the "image"

To contextualize, Bergson postulates that the world can be understood as "images," with an image being some facet of reality available for human perception. Bergson's claim is that humans shape their experience through selecting only some of these images through a process of enhancement and subtraction. To be able to perceive an object, some parts of it must come into focus with other aspects having to be ignored (Lawlor and Moulard, 2012).[8] Thus, while the Bergsonian image of the thing as represented does not differ from the material entity as such, it is altered in its diminution when we perceive it. For Bergson, humans only experience parts of reality by necessity, on the basis of what we need to perceive in order to preserve our bodily functions. What is discarded and kept is a matter of interest on part of the body. This insight of how humans isolate properties of objects and discard others, is echoed by postphenomenologist Don Ihde in his theorizing on the hermeneutics of technology, where for example a pair of binoculars enhance our visual capacity to make things come "nearer," while simultaneously reducing our capacity to

[8] See the section «Perception and memory»

perceive things that are physically close to us (Ihde, 2003). The entry point of Bergson into thinking about human perception thus seems suited to a study technology, something I will argue at the end of this section on Bergson that Hansen realizes and brings into focus.

Bergson and cinema

Bergson rejects cinema as being able to represent reality. as it's mode of representation mirrors that of the human. Human perception, as already established, is a selecting of images from the represented world. With his concept of duration (*la durée*), Bergson argues that human perception of reality is perceived successively and continuously (Lawlor and Moulard, 2012).[9] In cinema where images succeed on another to form a continuous stream, Bergson holds that this imitates the mechanism of human perception. However, this seemingly continuous projection is illusory according to Bergson. Whereas reality is defined by movement (meaning duration), cinema distorts this by taking still images and projecting them in rapid succession to give the effect of representing reality (Lawlor and Moulard, 2012). Bergson was early when he theorized this flux of the cinematic image as moving images.

Bergson's epistemology

To understand the implications of Bergson's concept of cinema, and later on Hansen, a quick recapitulation of Bergson's epistemology is necessary. For Bergson, knowledge is attainable by two human functions: Intuition and intellectual analysis. Intuition for Bergson is the way in which we can get a grasp at understanding the flux of reality. This intuition is closely linked to Bergson’s ontology that postulates that a defining aspect of reality is movement. The intuition, then, is best explained by relating one of Bergson’s own examples to give a sense of how intuition grants us a certain kind of access to reality: Unlike intellectual analysis in which we view objects from the outside by synthesizing perspectives (Lawlor and Moulard, 2012),[10] we enter “into” the thing by our intuition. Instead of observing and analyzing surface

[9] See the section «The concept of multiplicity»
[10] See the section “Creative evolution”

appearances of objects, we, crudely put, enter into the object, and see that it exists in the continuum of duration (Lawlor and Moulard, 2012).[11] The reason cinema is unsuited for acquiring knowledge of reality for Bergson is that it that it only gives the appearance of representing the temporality of duration. It is the fact that cinema (how it was physically supported before digital media) is composed of still images.

Bergson on affectivity

Affectivity is a central theme in Hansen's philosophy, and while he cites this concept from a wide variety of sources, it is Bergson's definition of affectivity that figures most centrally, and which will be of some importance in my use of his theory as it figures in Hansen.

Affectivity is for Bergson the human body's ability to act upon itself (Hansen, 2004, 5). By Hansen's explanation, Bergson argues that the human body has a "center of indetermination", which is the bodily mechanism by which we select images in our perception of reality. This quality of the body choosing which images to select is crucial for Bergson, and he writes of the body that "the act in which the affective state issues is not one of those which might be rigorously deduced from antecedent phenomena, as a movement from a movement; and, hence, it really adds something new to the universe and to its history" (Bergson in Hansen, 2004, 3-4).

The body then, for Bergson, is infused with the ability to dictate its own states, through the center of indeterminacy producing affect which leads to self-movement. In other words, the body's movement, understood as action, is influenced by what is perceived. When what is perceived – images – are chosen by the function of the body's indeterminacy, the body is given the capacity to experience a reality which is unique to it. Hansen's addition to this account, which is important in his theorization of digital media, will be discussed in the chapter dedicated to him.

Concluding

[11] See the section «The method of intuition»

The project of Bergson was then to show that humans have a certain access to the world, in which the body plays a central role. This does not mean that Bergson discounted rationality: His focus on the body as central to our understanding by its mode of isolation and diminution simply forms the basis of our epistemological limits. And it is by the body's ability to regulate its selection of images by which further action is propelled that the body is given a creative force in Bergson's philosophy. In short, this is the aspect of Bergson's account of perception on which Hansen expands.

Hansen's update of Bergson

Perception and the digital

Hansen grounds the need to update Bergson's account of human perception by arguing that with the mutable character of the digital, the human body creates its own images rather than just sampling already-there images by perceiving reality. The reason this happens is because the «digital image», as being composed of digital information, operates on a different logic than the images of pre-digital media, such as cinema and photography. What this means specifically can be explained by contrasting cinema with the digital image. While cinema as a genre and art form is reliant upon the succession of images to form a linear experience for the spectator, the digital image is not under the same constraints. It is thus with the advent of the digital that Hansen sees a new relevance for Bergson's theory of perception.

Difference between digital and analog media

Hansen defines the digital, perhaps uncontroversial, as being in essence changeable and indeterminate. That is, the digital is information that can be manipulated to yield certain outputs perceptible to human beings. While the physical support of analog media places certain restraints on them – taking a photograph will invariably produce a specific, physically stable picture – the digital as based on information is changeable by definition; the 1's and 0's that constitute it may be arranged and made perceivable in ways that not only encompass, but supersede analog media. So, a photograph that is scanned and imported onto

a computer would no longer operate by the same ontology as its physical counterpart (Lenoir in Hansen 2004, xxii). The photograph now seen on the screen only superficially resembles its physical counterpart. In reality, its digital support allows for any number of changes to happen to it, for example through image editing software. There is no necessary end product in this state, and the digital image can take on different capacities, some of which are used by social networking sites to connect people through hyperlinking.

Artworks and video games

When I am studying a video game, the physical support needs to be taken into consideration. While Hansen does not explicitly discuss video games, some of the installation artworks he analyzes might very well qualify for such a definition, but there is a difference between the installation artworks cited in Hansen's works and the domestic computer and game systems used for playing commercial video games. I will try to address some potential points of conflict here.

With a screen and speakers, the modern domestic computer conventionally yields two forms of output: Visual and audial. However, since the end product, the image on the screen and the sound from the speakers, is composed of information written in the language of binary, this output has a greater potential of diversity than that supported by analog media. What this means for Hansen is that art which uses images, video and sound no longer has to rely upon the conventions of analog media formats. In his works, Hansen is largely occupied with analysis of digital artworks, as they showcase some possibilities of the digital, and what new forms of experiences are possible for human experience in interacting with digital technologies. As such, the objects of Hansen's analysis, and which he uses to develop his theory, are largely installation artworks that are supported by cutting edge hard- and software.

Video games in general, and games like *Mass Effect* in particular, are comparably not designed to give the same experience. A consideration is that large portions of video games, including Mass Effect, rely to a certain extent upon cinematic presentation, and feature a story though which the player has to advance. As I will argue in my analysis later on however, the important role of the body in gaming might be seen as

more important in the sense of acting upon itself, than it is as a passive spectator to a series of interlinked images. So, while video games provide a different experience, with features of traditional media mixed in, they do qualify for an analysis informed by the theoretical framework Hansen maps out. This is recognized by Danish video game researcher Rikke Tøft Nørgård (2011), whose work supplements my reading of Hansen.

Hansen's conception of affectivity and embodiment

Hansen expands upon Bergson's theory of affect to argue that perception and affect are separated. Bergson hinted at the creative powers of the human body in proposing the body as a center of indeterminacy. Hansen claims however, that with digital media, further explanation is needed to show that perception does not dictate human experience, and proposes a theory of affect which stays true to Bergson's aesthetics of cinema.

Hansen defines affectivity as "the capacity of the body to experience itself as 'more than itself' and thus to deploy its sensorimotor power to create the unpredictable, the experimental, the new" (Hansen, 2004, 7).

Hansen draws on philosopher Gilbert Simondon when arguing for a temporal primacy of affectivity over perception. Hansen argues that the objects we perceive - or images – not only are filtered and selected by the body, but that affectivity is what connects bodily virtuality and bodily actuality (Hansen, 2004, 8). The affective body for Hansen is "the very place where […] diversity can be retained in a nonreductive aggregation" (Hansen, 2004, 25), which is achieved through the affective capacity of the body to create something new and unexpected. Hansen sees a correlate of this bodily function with digital media itself, as it is "impure" in the sense that it is fundamentally mutable. The conclusion Hansen draws is that since the digital lacks a physical support, the human body as "the 'place' where the self-differing of media gets concretized" (Hansen, 2004, 31). This insight is echoed by Don Ihde, who argues that hermeneutic representations of reality (such as an isomorphic representation of galaxies) already presuppose human

embodied perception (Ihde, 2011, 16-17).

Thus, by theorizing the digital as reliant upon the body, a close connection is established in which neither human nor technology can be said to function independently from one another. This view closely mirrors the postphenomenological embodiment relation, in which human and technology constitute a shared directedness. While the postphenomenologist account is more explicit in its conflating of human and technological intentionality, Hansen's approach is valuable in that it deals explicitly with digital media. Differences between the two approaches will be discussed in the ending section of the current chapter on theory.

In the next section, I will make a brief presentation of the phenomenology of Maurice-Merleau Ponty, as it relates to both Hansen and postphenomenology. The account will be briefer than the one of Bergson as Merleau-Ponty is both already established in the postphenomenologist literature, and because Hansen's use centers on one focal point of Merleau-Ponty's philosophy that requires less recapitulation to figure coherently.

Maurice Merleau-Ponty: The phenomenology of perception

French philosopher Maurice Merleau-Ponty's account of human phenomenology is influential in both Hansen's and Ihde/Verbeek's accounts of how humans relate to the world through the embodiment of technologies. I will highlight two points of Merleau-Ponty's philosophy: His postulation of the fundamental indifference of flesh and world, and the embodiment of technological artifacts. I will describe Merleau-Ponty's concepts as they are being used by Hansen.

Indifference of the flesh and world

Hansen's (2006) interest in Merleau-Ponty stems mainly from latter's conceptualization of the body as essential to processing of perceptual experience, and the primacy of tactility in this processing. Self-movement through tactility is for Merleau-Ponty what confers our experience of reality (Hansen, 2006, 5).

It is Merleau-Ponty's foundation of an understanding of how the body relates to the world which matters to Hansen. In particular, Hansen sees a connection between autopoetic theory (Hansen, 2006, 41) and Merleau-Ponty's theory of the body as having an internal "distributed agency," a conceptualization which let philosophy distinguish between the spatial operation of the body and how we visually perceive our own body (Hansen, 2006, 38-39). Further, the body is "indifferent" as regards its relationship to the world, as it is always relating to it through the interface of the skin. Hansen develops on this insight to argue that the Merleau-Pontean body is fundamentally technical, as human experience is always mediated by some sort of technicity, with the term being used by Hansen to mean any relation to what is external to the body (Hansen, 2006, ix). As such, Hansen sees the opportunity to argue for an understanding of digital media and technological artifacts as mediating tools. He is then especially concerned with those which involve bodily movement, as this is accorded an important processual effect in Merleau-Ponty. Further, when analyzing digital media art in which virtual reality figures as a compoung, Hansen sees this as a new way in which the body can explore its relation to the world, and hitherto unavailable forms of human embodiment may be available (Hansen, 2006, 5, xi).

Coevolution of human and technology, compatibility with STS

In doing phenomenology of digital media, Hansen is occupied with investigating how our interaction with current digital technologies may inform our understanding of the human as being fundamentally coupled with technology. Hansen supports this proposed coupling by citing French philosopher Bernard Stiegler's concept of *ephiphylogenetics*.[12] The somewhat arcane term points to the thesis that the human species has evolved not only biologically, but also by development of technics, pointing to techniques such as language, and technology. Stiegler supports this thesis by analyses of contemporary media practices as well as paleontological evidence (Hansen in Hansen and Mitchell, 2010). This theoretical aspiration of bridging the ontological divide between human and technology seems to resonate with the STS tradition.

12 Meaning evolution «by means other than life.» (Hansen in Hansen and Mitchell, 2010, 65).

While Hansen's point of departure in phenomenology and interest in media as opposed to technology as such may give the impression of not being easily reconciled with STS, I propose to show that the similarities, as alluded to above, are strong enough to warrant the inclusion of his work in an STS thesis.

There are two further reasons for why I believe Hansen should be considered relevant for this thesis. Firstly, as he deals with digital media, his interest lies close to my subject matter. A certain translation effort has still been necessary to adapt his theory to deal with video games, as his preferred subject of study is installation artworks. Secondly, I believe initiating theoretical exchanges with neighboring fields of study, such as media studies, may help to enrich the discourse of STS.

After having done a survey of studies done on single-player video games,[13] although there is a plurality of approaches, a certain aspect seems to be under theorized. This aspect is how we interact with video games not merely through embodiment, but what this embodiment signals about our relationship with technology in general. The term embodiment in the context of Hansen's theory is informed by contemporary research in neuroscience, where the sense of feeling oneself situated within one's own body is inseparable from cognitive activity (Hansen, 2004, 3).

Intended use of Hansen in the analysis

What Hansen will attribute to my analysis of *Mass Effect* is a framework in which this connection can be understood. To understand the affectivity of *Mass Effect,* I believe it would be valuable to contemplate and account for how this close, evolutionary, relation to technology might help us understand certain aspects of the games. One of these aspects is in what sense our bodies can be seen as exteriorized through embodied interaction with the interface of the computer. A related aspect is what role the avatar plays in this connection. These are questions which Rikke Toft Nørgård discuss in her paper "The Joy of Doing: The Corporeal Connection in Player-Avatar Identity" (2011). I will contend the claim Toft Nørgård makes about agency not being distributed in the player-avatar relation.

13 I'm excluding massive online multi-player games, as the studies done on this type of video game invariably takes into account the player's relation to other human players. *Mass Effect,* which I analyse, is a single-player game, and thus requires a different theoretical and methodological approach.

By looking at how the player distributes agency to a virtual agent in the form of the avatar, the question arises as to what this practice of playing a game where the player shares eir agency with a technologically mediated character can tell us about human and technological agency as such. Hansen's theorization about how interaction with digital technology both allows for an actualization a bodily potential, and how the actualization of digital information is reliant upon the body, should help bring clarity about what is affective about *Mass Effect.* The how of the question, namely what effect this practice of distributing agency to an avatar has on the player, will be considered in the discussion on postphenomenology as it features in the analysis.

Phenomenology and self-understanding through narratives

To achieve the synthesis described above between embodiment in roleplaying games and what this relation can reveal about human interaction with technology, I will turn to Danish phenomenologist Dan Zahavi's discussion of narrative self-understanding. His account, which lends credit to philosophers Paul Riceur and Ronald McIntyre, seeks to describe what it is that informs our conception of who we are. In short, he investigates how the self is formed, and what demarcates the notion of a self from the more abstract term person. Zahavi's approach focuses on human self-understanding as being performed in the sense that it is necessarily lived. What Zahavi describes as necessary for the formation of a self is that one needs a structured story of one's life. That is, when we either reflect upon “who am I?” or try to explain to someone «this is who I am», we are taking into account our history. This story might be part true and part fictional. Additionally, this story is not the totality of lived experience up until the present of the individual. Our personal identity, the «who» of someone, is reliant upon a coherent story of our life. With McIntyre, Zahavi states that we are prone to creating narratives as we live out narratives continually in our lives. Our understanding of who we are is informed by the stories we tell about ourselves. Zahavi problematizes the narrative concept of self, but for the purposes of this thesis, I have found the present argument of how we form our identity through narratives to be informative about player interaction with

Mass Effect. A note about the validity of the concept of narrative self-understanding must be made however. It is not necessarily the case that all humans hold a narrative conception of themselves. It is, on the other hand, one way of explaining who one is. My analysis of *Mass Effect's* narrative component and how it affects self-understanding is therefore not to be seen as monolithic, but a possible explanation for how some players might be influenced by *Mass Effect* being a video game in which the main character is shaped by past events and moral choices.

Postphenomenology

Postphenomenology: Introduction

In this section I will present the relevant aspects of postphenomenology for my study. The structure of this discussion will take the following order: First, a brief presentation of the theoretical influences, then a clarification of the central concepts I will be relying on.

Postphenomenology has made a name for itself by the work of Don Ihde in particular, and more recently through the work of Dutch philosopher of technology Peter-Paul Verbeek. While mainly reliant upon Martin Heidegger and Merleau-Ponty for its theoretical background, some effort has been laid down in closing the gap between philosophy and actor-network-theory (ANT), in the hopes that the semiotic approach of ANT can be coupled with the insights phenomenology has to offer. It is also worth noting, that while postphenomenology is relatively close to Hansen's phenomenology of new media, the approaches differ somewhat in how human embodiment is defined, with postphenomenology avoiding the discourse of neuroscience which Hansen merges with the insights of classic phenomenology. Hopefully, these divergences will become apparent during my juxtaposition of the two positions, and will bring about some clarity as to how we might best understand the (post)phenomenology of *Mass Effect*.

Theoretical background: Merleau-Ponty and Heidegger

In postphenomenology, some of the same insights in Merleau-Ponty are found as those pointed to by Hansen, although they are expressed differently. This theme of overlapping interpretations with differing vocabulary and trajectories of argumentation between Hansen and postphenomenology is why I see Hansen as, if not a postphenomenologist proper, then holding similar aspirations in investigating how humans relate to technology, and in showing that agency is constituted in complex ways that challenge the subject-object dichotomy, a theme trenchant in the STS tradition.

The postphenomenologist debt to Merleau-Ponty largely rests upon Merleau-Ponty being one of few earlier philosophers to have accorded serious thought to how technological artifacts figures in our interaction with the world. Merleau-Ponty's famous example of how the blind man's stick becomes an extension of his physical body, mediating his relation to the world.

Verbeek takes issue with Merleau-Ponty on epistemological grounds however. Verbeek questions Merleau-Ponty's assertion that phenomenology is able to provide a direct access to reality. Rather, Verbeek argues that our access to reality is always mediated. If it is not mediated by a technological artifact, it is always mediated through human interpretation (Verbeek, 2000, 125). Hansen is not as explicit in making this distinction, as he valorizes cognitive activity, but his approach may function as complementary to Verbeek's in the study I am undertaking.

German philosopher Martin Heidegger is another central background figure in postphenomenology, and is perhaps one of the most influential thinkers on technology. Technology figured centrally in his work, but according to Verbeek he made some critical errors. Heidegger did not theorize technological development as being a coevolutionary process with humans, but made a distinction between modern and pre-modern technologies. Modern technology for Heidegger was dangerous because it lead, in his thinking, to an instrumentalist attitude towards nature and alienates humans from a "natural" way of living (Verbeek, 2000, 56-59). This view is a result of Heidegger's ontology, but an exposition of this would draw too much

from the present discussion, and is not as necessary as the presentation of Bergson, as postphenomenology in large has sought to replace the view on technology Heidegger held. Postphenomenology is as such a reaction to dystopian conceptions of technology, as well as moderating the epistemological aspirations of classical phenomenology. Emerging from this background Ihde and Verbeek have constructed a phenomenological framework that rather than examining the conditions for the possibility of technology, instead focuses on concrete technological artifacts and how they mediate human experience in specific contexts (Verbeek, 2000, 7-8).

Alterity relation and composite intentionality

Verbeek distinguishes several types of relations that may occur between humans and technologies. Of interest to the present study are the alterity relation and what he terms composite intentionality. I will only give a brief presentation of both, as the concepts require fewer steps of explanation to be figure. I will also expand upon the concepts in the analysis, where they are more readily understandable. I see this method as staying true to postphenomenology, where concrete instances of human-technology relations are what inform the theory. The alterity relation will be discussed first in the present section.

The alterity relation described by Verbeek (2000) refers in postphenomenology to an instance in which human intentionality is directed at a technological artifact (pp. 126-127). This relation emerges when an artifact is emitting signs of spontaneous action, or draws attention to itself. This is why the relation is further specified as a “quasi-other” relation, as it leads humans to treat the technological artifact in question as having agency in the sense that we ascribe it to humans. A second component is that these types of artifacts may invite interaction between the human and the artifact, in which the artifact does not mediate a relation to the world, but is interacted with as if they possessed agency.

What Verbeek (2008) terms composite intentionality is a radicalization of two further concepts in postphenomenology as they were developed by Ihde: The embodiment relation and the hermeneutic relation. Verbeek describes the need for this radicalization in the following words:

> [T]he dash between humans and technology in the embodiment relation (human-technology) -> world blackboxes the specific nature of the various relations that can exist here between humans and technology, and which are extremely relevant in the context of cyborg intentionality. Second, the dash between technology and world in the hermeneutic relation human -> (technology-world) blackboxes the specific relations that can exist between mediating technologies and the world. (Verbeek, 2008, 390)

The embodiment relation, which accounts for how humans relate to the world through the mediation of a technological artifact. In the embodiment relation, the technology becomes an extension to the human, as a pair of contact lenses would function to give us a mediated experience of reality. In the hermeneutical relation, the human is presented with a technologically mediated interpretation of reality, such as when we read a barometer. The problem with these relations is that fail to account, according to Verbeek (2008), for relations in which the boundary between human and technological intentionality is blurred to the point of constituting a new entity, a cyborg.

Human technology relations: Clarifications

What kinds of relations do we enter into when we play a video game? A point of contention between Hansen and the postphenomenologists arise on this question, in that Hansen might seem inclined to agree with Bernard Stiegler's thesis of originary technicity; the pre-technological (with technics preceding technology), and fundamentally cyborgian nature of the human. Verbeek on the other hand, offers a stricter (though compatible) definition of the term cyborg, which he develops as “composite intentionality” (Verbeek, 2008). What Verbeek argues is that the concept of intentionality must be expanded to include what we with ANT terminology may call non-humans. In other words, technological artifacts may be said to have their own directedness towards the world, and when such a technology merges with human intentionality, a shared intentionality is established from which the cyborg emerges. Considering Merleau-Ponty’s concept of the indifference between flesh and world, it would seem plausible to ascribe Verbeek the position of accepting the thesis of originary technicity on philosophical grounds.

In their approaches to our relation with technics, Stiegler and Hansen sees posthumanism, our cyborgian status, as always having been our condition, although our realization of this is due to the advent of the digital convergence of media. For the postphenomenologists however, at least in Verbeek's treatment of cyborgian intentionality, the human is somewhat separated from technology. The difference seems to lie in two connected issues: Where does the body end, and is this horizon thought as conceptual, or in a more fundamental sense, as ontologically real? A discussion of the two positions on matters of interface may clarify this difference.

Postphenomenology has developed some advanced conceptual tools for making sense of our interaction with technological artifacts, and may add to Hansen's account on this topic. While Hansen points out that the interface is not necessarily consciously perceived, he is essentially repeating Heidegger's concept of the ready-at-hand; nothing separates our interaction from interfaces coupled to digital realms as opposed to hammering a nail. In Heidegger's substantivist account of our use of tools, the technological artifact withdraws from our consciousness when it is working properly for the function we have assigned it to perform. Were we to look to Verbeek on the other hand, we find a much broader typology of human-technology relations, some of which are simultaneously present in the gamer-video game relationship, broadening the scope from Hansen's account.

By technologically mediated perception, we enter into a relationship with the world through technologies in which new forms of experience become available. In other words, we are able to experience aspects of the world that would otherwise be unavailable through the apparatus of naked human sensation. An example could be night vision goggles that facilitate seeing in the dark. This insight is why the insights of postphenomenology are valuable in analyzing the impact technologies have on our relationship with the world. This reflects why there is something to be wanted from Hansen's analysis, as it describes affectivity as being immediate, even sub-intentional. My argument about the great affective potential of *Mass Effect*, as mediated through hand-eye coordinated activity and narrative performance, is that it combines these different aspects to form a singular experience not

reflected in Hansen's selection of new media artworks.

Part III: Analyses and application of theory

What are video games?

To begin with, I will try to get at the core of what constitutes a video game. While influential typological approaches highlighting rules of play as central (Aarseth, Smedstad, Sunnenå, 2003) have a great deal of merit (Mäyrä in Perron and Wolf, 2009), a perhaps under theorized aspect of video games is the how they relate to the digital medium. Following Hansen and his work on the phenomenology of new media, I will raise the abstraction and investigate the conditions of possibility for the video game; namely what Hansen terms “the digital image.” I will argue for the possibility of a more specific, video game situated, reconfiguration of this concept. This will involve a discussion the aesthetic and ethical implications that follow from establishing the body as central to the materialization of the digital image. This will be related to the possibility for establishing a phenomenological approach to researching video games that does justice to the concept of narrative, which has been contested in the field of study (Jenkins, 2004).

In the next section, I will point out the specificity of our bodily interaction with the computer interface in gaming, and how this necessitates a shift from Hansen's focus on cognitive activity. This shift will take a turn from the body-brain part of embodiment, to examine the praxis of embodiment as body-game interaction per Toft Nørgård’s theory.

Mass Effect and the digital image

Mass Effect seems to take inhabit two paradigms of media logics transversely: The visuals follow the logic of cinema to a certain degree, employing numerous cut scenes in which traditional narratology applies. Additionally, it is not an “open” game, both in respect to movement in the game world and

relating to the focus on goals. The player moves through combat sequences in pre-scripted sequences, where progression is interspaced with cut scenes that highlight moments of tension and progression. Yet at the same time, it diverts from the cinematic in the ways Hansen refers to in his discussion of how digital media distinguishes itself from traditional media formats, such as cinema (Hansen, 2004, chapter 1). The argument Hansen makes is that the digital as medium is fully reliant upon human embodiment to attain its existence. In experiencing digital media, the human engages in a “haptic perception,” which implicates the combined activity of brain and the bodily sensory modalities for linking «the physical locality in which viewer-participant finds herself with the virtual dimension» (Hansen, 2004, 113). For the purpose of this paper, “viewer-participant” might very well be supplanted with “player.” What is at stake with the digital image, and consequently the video game, is active participation in creating the “image.”

Video game researcher Rikke Toft Nørgård has proposed the term «handsight,» through exactly such a realigning of Hansen's concept of haptic perception. While Toft Nørgård's term is more readily understandable and relatable to video gaming, I wish to further specify it to challenge her claim that «the difference between first-person and third-person perspective insignificant» (Toft Nørgård, 2011, the paragraph “From visual perspective to handsight”). This specification does not challenge that both perspectives rely on “handsight,” but that there is a difference between the two perspectives, which is based in how the player relates to the avatar. Additionally, while Toft Nørgård is correct in asserting both perspectives are first-personal *for the player*, if we look closer at the cyborgian status of the player-avatar entity, it can be seen to constitute a different gaming experience. Her statement is also challenged by postphenomenology, in which different types of (technologically mediated in this instance) representations of objects in space imply different modes of human intentionality. To clarify with an example, a third personal perspective such as in *Mass Effect* would imply an alterity relation. A first personal view would imply an embodiment relation. This discussion will follow after the current exposition of Hansen's development of the concept of the digital image.

The body as framer of the digital

Hansen finds support for his thesis in the work of neurobiologist Francisco Varela, where affectivity is shown to precede temporality, which is crucial to an understanding of our involvement with, and bringing about of, the digital image. If, as Varela asserts, that "[w]e have neuronal-level constitutive events that have a duration on the 1/10 scale, forming aggregates that manifest as incompressible but complete cognitive acts on the 1 scale" (Varela, 1999 as cited in Hansen, 2004, xxv), there is a certain relationship between temporal flow of digital information and the sub-perceptual processes that produce the immediate, phenomenological «now», which is shown to last 0.3 seconds. With this materialist reading, the assemblage of microphysically operated events can be seen to shape our experience of presentness. Accordingly, the temporality of digital media, which may exceed our perceptual abilities is reliant upon the human embodiment to find physical manifestation.

This conclusion is very strict, and is by my interpretation Hansen's attempt to counter technological determinist readings by showing that the temporality of digital media may still be the subject for human aesthetic experience. Hansen finds support in investigating new media artworks by artist Bill Viola in which film shot at high speeds is slowed down to show the tracing of emotion on human faces, thus expanding the phenomenological now. In *Mass Effect*, we could argue for a similar technical mediation of presentness by the suspension of time in sequences where the player is asked to choose how to respond in a conversation, with either the avatar's face or a non-player character's face «waiting,» allowing for a dwelling on the situation for the player. In both examples, the human spectator or player is implied in the technical configuration of the altered temporality of the digital image. To reiterate Hansen's argument concerning the digital image:

> "[The image itself has become a process and, as such, has become irreducibly bound up with the activity of the body. [...] The image can no longer be restricted to the level of surface appearance, but must be extended to encompass the entire process by which

> information is made perceivable through embodied experience. This is what I propose to call the *digital image*." (Hansen, 2004, 10)

If the body operates as the frame for the digital image (Lenoir in Hansen 2004, xxiv-xxv), this can explain why, incidentally, video game players are occupied with the optimization of frames per second on the screen, and the technical hardware to support this optimal ratio. Conversely, this should not be seen as an explanation for an autonomy proper to the digital as medium. Autonomy in this context would equate technological determinism in that the medium develops and operates on a logic of its own. This view of technology as being independent of society and humans has been challenged by the field of STS, and Hansen follows in leveling a similar criticism which I will discuss now.

To recapitulate the words of French philosopher Henri Bergson, the main influence of Hansen (2004), the human body's "center of indetermination" which selectively appropriates from the world of images – that is, perceived reality – creates an individually experienced selection of the sum total of objective reality (Hansen 2004, 4). Thus specified, and in harmony with Varela's exposition of our cognitive functioning, this selection is a result of casting aside some aspects of the perceived object, and focusing on others. This conception of perception grants autonomy not to the medium, but implies human embodiment; the body acts upon itself to provide "a singular actualization of data" (Hansen, 2004, 3).

I will return to this topic in the latter chapter of this paper, where I will expand upon this function by drawing upon recent work in the field of postphenomenology where perceptual technological artifacts are explained as instantiations of this logic of human embodiment. I will make the distinction between human and technological intentionality *as* directedness (as selection) by amplification and reduction. This in turn, will be related to the specifics of *Mass Effect* as a video game, with the framing function being discussed in relation to temporal, spatial and narrative elements of *Mass Effect*. I will end the chapter with a consideration of the ethical and political discussions this view makes possible, and why the *Mass Effect* ending controversy, understood in this

light, encourages the active involvement of video game researchers in the development of video games.

Avatar and identity

Player-avatar relations

In this chapter I will discuss the merits of some approaches to understanding player-avatar relations. I will also make an analysis of the player-avatar relation of *Mass Effect* and try to account for three aspects of it I believe are crucial to understanding the appeal of *Mass Effect*: First, I will propose a reformulation of Toft Nørgård's (2006) definition of the visuality approach. This will be a discussion of our (supposed) identification with the avatar as a doubling of the player's self. This discussion will touch upon the topic of identity as felt by the gamer. Secondly, I will make use of Hansen (2006) to discuss the avatar as prosthesis, an extension of our bodily involvement with the game. I will contest Toft Nørgård's demarcation of the concepts “prosthesis” and “corporeal digitality” in this respect. Here I take up the issue of narrative self-understanding and how this relates to my argument that our connection with avatars must be understood dependent on the type of game. That is, there are several relations possible, each dependent on the specific game, and how the avatar is presented to the player.

The visual aspect of the video game avatar

When you first start up *Mass Effect* and create a new game, you are prompted to either accept the default character preset (female or male) or modify eir face to be the way you like. Many gamers will modify the characters looks, either to resemble themselves or just to create a character they find appealing or proper to the game. The fact that many gamers spend time and effort to customize their avatar’s appearance seems to invite a closer look at Toft Nørgård's methodological discussion of visuality.

In her assertion, the visuality approach understood as valorizing the doubling of the player’s

body image is inferior to perceptuomotor activity (meaning hand-eye coordinated motor activity) when we wish to account for identity in the player-avatar relation. She frames the question of gamer-avatar identity as a matter concerning what she coins “digital corporeality” (Toft Nørgård, 2009, 1). While my argument also supports the centrality of *doing*, I will try to interweave a topic left untouched in Toft Nørgård's study; the transformation of experience in third person roleplaying games in which narrative and embodiment come together to constitute a certain kind of gaming experience. In avoiding generalizing in trying to account for all video games that feature avatars, I will try to make sense of *Mass Effect* and its affective potential first and foremost. Affect and affectivity is to be understood broadly in the present discussion as the emotional influence on players.

To this end I will introduce the term «ludic self-emergence» as a conceptual tool, which is meant to address the affectivity of *Mass Effect* and similar games: I aim to show a possible synthesis of the theoretical frameworks employed in my study to account for how this affectivity is established through. The conceot of narrative self-understanding will be a point of departure from Toft Nørgård’s account. This form of self-understanding might be influenced by the player’s relation to the avatar and non-playable characters. Toft Nørgård’s concept of “handsight” is still important, but I will argue that the perceptuomotor compound of the gaming experience is but one necessary component to understanding the affectivity of *Mass Effect*. “Ludic self-emergence” as a concept is therefore meant to include and synthesize the different ways in which *Mass Effect* as a mediating technology transforms experience through the player-avatar relation.

Mass Effect and the quasi-otherness of non-playable characters

There are some arguments for why *Mass Effect* may have a greater affective potential than older roleplaying games like *Morrowind* (Bethesda, 2002), where all social interaction was text based. *Mass Effect* on the other hand, employs trained voice actors to infuse the characters with a more readily affective capacity in interactions with the player-avatar. The importance of this may be

explained if the postphenomenologist concept of the alterity relation is invoked.

According to the concept, certain technological artifacts invite humans to treat them as a quasi-other. It seems reasonable to include virtual characters into the category of "technological artifact" in this context, as they are in the end digital character; they do not represent real persons. While the player knows the characters are non-human, they are nonetheless treated anthropomorphically, as they exhibit outward signs of behaving like humans. While it remains a problem in the philosophy of mind that there is no way to establish certain knowledge about other humans having conscious experience, there are some features of video game characters that are interesting in their own right.

Verbeek (2000) writes of the alterity relation that an automobile does not have the same kind of agency as an animal, much less a human (p. 117). This conception of agency is at odds with the semiotic approach of ANT, but does not necessarily conflict. As postphenomenology is interested in investigating specific relations that occur between humans and technologies, the alterity relation does not attempt to explain more than one facet of human *experience*. Verbeek would not deny that technologies have agency in the sense that they influence human experience; his argument is that a phenomenological account of technologies may inform how we wish to shape the development of technology.

In *Mass Effect* the characters may be seen as hybrids of human and technological agency, although the end product as it is experienced by the gamer seems to fall into the category of being solely technological. The reason why it is possible to make a distinction is that the characters are not only voiced by humans; their lines are scripted by by writers, and their facial likenesses may even be modeled on real life persons. These representations are not photographically correct however, and could as such be seen have a hermeneutic intentionality. This arises as an interesting point only if the player recognizes the fact, and is largely inconsequential to the playing experience of *Mass Effect* where the characters are fictional, and as such not meant to have a human counterpart in the physical world.

The strong quasi-otherness of the characters in *Mass Effect* is important in accounting for the affective potential of the game however, as they are treated as agents, and help immerse the player by displaying emotional responses to the actions that the player-avatar performs. In this way, roleplaying games have taken a step towards traditional drama in emphasizing the verbal aspect of establishing the emotional link between spectator and character, which also features in tabletop roleplaying games and live action roleplaying (Lindley, 2005).

When drawing the connection to narrative in relation to quasi-otherness, it does not imply that we must understand games in terms of narratological analysis to make sense of the outcome of our relation with them (Jenkins, 2006). Rather, by looking at how we form the story of who we are, the affectivity of *Mass Effect* may be understood better than only by referral to our bodily interaction with it through the computer interface. This is why Hansen's analysis solicits an update if it is to be applied to games such as *Mass Effect*. This question of self-understanding and narrative will be tackled in the section on narrative self-understanding at the end of part III. There are still some questions regarding the role of the body in the player-avatar relation however, and I will now turn to a discussion of body image and body schema in that respect.

Body image and body schema: Indifference of player and avatar bodies

To get a better understanding of how the body interacts with the digital, two terms need to be clarified: Body image and body schema. Hansen defines body image as follows: “[T]he body image characterizes and is generated from a primarily visual apprehension of the body as an external object” (Hansen, 2006, 38-39).

The body image, then, exists as an intentional object, meaning it is a mental representation of our own body. Yet, expanding upon Hansen's limited visualist definition will be helpful when evaluating player's relation to the avatar. Therefore, I will look to philosopher Shaun Gallagher's (whose article I cite is also used by Hansen) two other aspects of the body image to inform the concept: In addition to

the visual representation, the body image also includes our emotional relation to our body; what we think *of* it. The third and last aspect is our conceptual, or theoretical, understanding of the human body as such. (Gallagher in Bermudez, 1995).

On the other hand, there is the body schema, which Hansen, drawing on Gallagher and Merleau-Ponty, defines as encompassing of “an 'originary,' preobjective process of world constitution that, by giving priority to the internal perspective of the organism, paradoxically includes what is outside the body proper, what lies in the interactional domain specified of embodied interaction” (Hansen, 2006, 39). The body schema, to word it differently, is then how the body operates its connection to the world, or environment, through self-regulating, automated processes and a pre-predicate aligning of the body in space. How we move and posture ourselves, our motility, is reliant upon the body schema, and this process is according to Gallagher “carried out prior to or outside of intentional awareness” (Gallagher in Bermudez, 1995, 228).

Body image and body schema in *Mass Effect*

What *Mass Effect* and games similar to it bring to light is that from a third person perspective, body image and body schema is collapsed and effaced to a certain extent. This effacement however is not complete, as the avatar's bodily movement is limited to the restrictions mouse and keyboard input yield. Then again, *Mass Effect's* avatar is not meant to function as an identical doubling of the body schema or body image; its function is to allow for a specific (yet multi-faceted) kind of human-technology relation to occur. This relation is dependent upon the perceptuomotor activity of the gamer and does not seek to function as what Hansen describes as the “representationalist verisimilitude” informing the fusing of physical and virtual space in entertainment industry (Hansen, 2006, 2). Rather, *Mass Effect* and video games in general, while most certainly relying on textured worlds and detailed environments; have an interest in *reducing* the complexity of reality, both in terms of interactivity and operationality. Being a video game, progression through *Mass Effect* is achieved by solving puzzles, overcoming obstacles and making decisions. If the game sought to be a

representation of reality, it would have to account for all of the minutia that belongs to physical reality, and when operation is limited by the screen, sound and mouse-keyboard interface, the game would be extremely complicated to maneuver. It is precisely by simplification, with only specific objects being available for manipulation, that progress at a comfortable level is achieved.

In this way *Mass Effect* can both invite an embodiment relation in which the player immerses eirself and acts in the virtual world, and still refuse any representationalist commitment.

While Hansen could be interpreted to see video games as an early stage of the aspiration towards disembodied, fully immersive representations of reality, I would contest this stand with another argument, the claim of which is that what makes video games like *Mass Effect* appealing is their ability to both test the weaknesses and strengths of the body. Hansen asserts this function to be the great potential of "mixed reality," or what might crudely be translated to "augmented reality." While *Mass Effect*'s graphics allow for an understanding of the space in which the player-avatar moves, it is not meant to imitate real space. Neither is natural perception meant to be supplanted by a technological variant. A theme running through the present study is the primacy accorded to the bodily interaction of the player, and it is in this respect that the body schema of player and avatar, and the collapse, strengthens the video game's position as worthy of consideration as an instantiation of "mixed reality".

Hansen writes of "mixed reality" as «simply one more realm among others that can be accessed through embodied perception or enaction." In this realm "emphasis falls less on what is perceived in the world than on how it comes to be perceived in the first place." He concludes that this «*foregrounds the constitutive or ontological role of the body in giving birth to the world*». This reads like a description of what video gaming has been achieving for the past two decades, since the release of *Tomb Raider* (Eidos, 1996), as one of the first third person games with a humanoid avatar.

I will return to the relation between the body schema of player in the below section after a brief examination of the concept of body image.

Creating the avatar

I will now return to the discussion of the character creation feature of *Mass Effect.* See *Figure* 2. By allowing the gamer the option to customize eir character's appearance, the gamer is given access to the use of technics to exteriorize self-perception, to actualize aspects of the player's body image. As AdmiralCheez, a user of BioWare's online forums BioWare Social, puts it: “Right at the character creation screen, I was given the option to fashion my very own hero, and she wouldn’t be the personality-less doll that most RPGs offered” (AdmiralCheez, 2012). To further punctuate the importance of the character's visual representation to the gamer, a look at the controversy over the character import feature that sprung up at the launch of Mass Effect 3, should add some support.

From the first game to the second, and the second to the third, the gamer had the choice to import their avatar's face by means of a save file in which this information was stored, with updated graphical quality at each turn. With the launch of *Mass Effect 3* however, there was a bug[14] that made the game crash when users would attempt to import a save file originating from the first *Mass Effect* (Priestly, 2012). Given the multitude of combinations possible in configuring the appearance of the avatar’s appearance – twelve categories of facial configuration with up to fifteen modifiers within each – it would take a very keen eye and a lot of time to reassemble your avatar's face in *Mass Effect 3's* character creator.

To correlate this function of constructing the avatar’s face with Hansen's analysis of Tim Hawkinson's artwork *Blindspot*; in that artwork, the artist made a graphical representation of what he could not see of his own body, capturing what Hansen calls the “power of imaging” of the embodied being, “insofar as it is an 'originarily' technical being” (Hansen, 2006, 11).

In customizing the avatar that mediates the player's interaction with the virtual universe of the video game, this logic is taken even further as the player is not only transferring some facet of eir own

[14] “Bug” is a colloquialism for error in the software.

body image (as likeness or ideal representation), but acting through a technical body of eir choosing through the collapse of the body schema's of player and avatar. The connection to the avatar's body is intimately connected to the body of the player by perceptually informed motor activity. And it is exactly motor activity which provides the (relatively) seamless transition between physical and virtual fields of experience: "this tactile dimension serves to confer a bodily – that is, sensory – reality on external perceptual experience" (Hansen, 2006, 5).

Indeed, Hansen further pushes this point in acknowledging that with our contemporary technogenesis, meaning our coevolution with technics and technology, the power of *imaging* has become realized as the "*primary* self-experience" (Hansen, 2006, 13). It might be argued that when creating a character in a video game, you are merely admitting to the idea of representationalism, but this is a false assumption. Achieved with great success in *Mass Effect* is the identification with the avatar, not just through motor activity, but through the shared, or rather merged, agency of gamer and avatar. By reframing this with the terminology of Verbeek, this relation would constitute a composite intentionality. We will return to this point further on, in a discussion on the narrative component of *Mass Effect*.

Imagining as constitutive of human self-expression

To further the discussion on images of self and self-extension through technology, I will compare with *Mass Effect* another analysis Hansen performs of a new media artwork; Fleischmann & Strauss' *Liquid Views* from 1993. According to Hansen, this artwork functions as "a *technically triggered experience of the organism's power of imaging*" in that the spectator distorts eir own image through tactile interaction with a touch sensitive interface. There are several correlates between this artwork and the character generator of *Mass Effect*, although the difference lies in distorting an image of self vs. imagining an image representative of *a* self.

The effect that remains the same in the two instances is nonetheless that the spectator, or gamer, is

tasked with exploring eir body image and personal identity, and in doing so in conjunction with the technical support of the digital triggers the potentiality of imagining as inherent to the human *qua* organism. (Hansen, 2006, 8-19). Hansen's argument on this point is largely parallel to his discussion of the “digital image” in *New Philosophy for New Media* (2004), where he pressed that the actualization of the digital, it's physical manifestation, necessitates the human body as surface of convergence, as place of composition. Again, this insight is shared by postphenomenology, although the argument leading up to the conclusion is worded differently in that discourse.

When Hansen shifts the perspective from “digital” to “virtual,” the argument remains largely the same: The virtual as produced by digital technologies is reliant upon the embodied interaction of the human participant, for the imaging potentiality to be realized through operationalization as phenomenalization. This means that the body dictates its own experience, by being the selector of images proper to it, a Bergsonian theme Hansen sees parallels to in autopoetic theory (Hansen, 2006, 13). While compelling, Hansen’s introduction of autopoesis in support of human agency borders on epiphenomenalism, or at the very least redefines agency as to render it non-intentional on the level of experience.

While Hansen points that Hawkinson's work clearly shows that the internal perspective as a mode of self-experience is made possible by concrete instances of image mediation. In the case of *Mass Effect* the argument can be radicalized, in that it is not strictly *imaging* from the internal perspective which constitutes the self-experience. It is additionally the power of *imagining*, in which the human-technological dualism is further challenged as a conceptual divide. The gamer is not just engaging in imaging through creating eir character in whatever way they choose; ey are able to take part in virtual worlds as embodied[15] agents with intentionality that surpasses the boundary of the flesh. The technical body of the avatar can thus be seen as a technical extension of motor intentionality which marks it as an instantiation of Hansen's argument that “all reality is mixed reality” (Hansen, 2006, 5),

[15] In the postphenomenological sense of experiencing the world through the mediation of a technology.

meaning we are as humans essentially coupled with technics and technology.

Gaming as praxis

A point Hansen does not elucidate in his work is how video games have a special position in the hierarchy of new media expressions in that they constitute not only a *reflection* on our technogenesis, as gallery art does in the, temporally limited interaction, context of the gallery. Increasingly, video games have become part of daily life for many people, and the signifier "gamer" is being used both self-descriptively, and as a designator by other by others to establish the identity of those who play video games. Video games may as such be seen as not merely a reflection, but as an actualization of our technogenesis through the praxis of being part of daily life.

Extending the body

Through video games, the player is acting in virtual space, ey is not acting solely in the physical world. Rather, when interacting with the virtual through video games, the player is not directed at the world, ey is experiencing a composite intentionality through extending eir flesh and narrative to eir co-narrative and co-flesh with the video game character ey act with. Through the avatar the player experiences shared agency in a very literal sense, and shared intentionality towards the *virtual* world, which we cannot fully enter. The avatar though, is fully there, yet is still intimately connected to the player through hand-eye coordination and the mechanism of narrative self-understanding. These elements of *Mass Effect* together describe a mixed reality in which the affective body explores its own boundaries and functions through the digital. As such roleplaying games are critically self reflexive; they are not simply escapism. *Mass Effect* as such a game constitutes an intentional extension to our worldly body which offers a potential for self-reflection and what I term ludic self-emergence; our self-understanding may be seen as influenced through the specific practice of playing video games like *Mass Effect*. This leads from the question of the visuality of the avatar to its metaphysical status:

We can see it, and identify with it through a psychological mechanism, but what is it? Is it real? What does that even mean when referring to a digital object?

Some solutions have been proposed, and video game researcher Eric Olson addressed some of these at the 5th International interdisciplinary conference on Philosophy of Computer games in 2011. One of the solutions I think is worth answering and disproving for the purpose of this paper. This view is that the avatar can be seen to metaphysically relate to the gamer in the way that an actor relates to the character ey is playing. While intuitively appealing, there are some problems with this approach, at least in the way it has been proposed so far. When an actor is playing a character, ey is pretending to be someone else; whether this character exists or not is irrelevant, because as Olson points out, representation is relational (Olson, 2011, 6). Is the player really pretending to be someone else when playing a video game with an avatar? This may depend on the game, but is certainly not generally true, as Olson points out.

When playing a game with what may be called generic avatars that lack a coherent self, by what we may call a "personality" or the "who-*ness*" of someone, is the player really pretending to be that avatar? It seems there is a need for a distinction when talking about video games and the psychological connection to avatars. Some games employ a stricter instrumentalist mode where the avatar functions as a tool without being "brought to life" in the gamers imagination, as it were. In games where identification with the avatar is important, such as in *Mass Effect*, the gamer may feel as if they are not simply manipulating a graphically rendered figure onscreen to accomplish goals, which would be the minimum description of a video game. Rather, the player is invited to form some other connection to the avatar. A connection which, if we look to player testimonies, seem to interchangeably refer to the avatar *as* Shepard and *as* eirself. In other descriptions, the lines between Shepard and gamer are blurred so as to give the impression of a so intimately shared identity that it is hard to separate where one ends and the other begins, something I identify as an effect of the composite intentionality at work.

One might mention method actors in relation to this, which would seem to be a closer observation, *in* the instances where the gamer and avatar merge in the mind of the gamer. As for Olson's original actor argument, I still find it unconvincing, and I will provide some further reasoning for this. It is important to note that Olson is solely interested in matters of identity, with the conclusion that video game avatars have the same metaphysical status as the figures used in puppeteering. Yet Olson admits it "would be nice to know" (Olson, 2011, 9) what modes of representation are at work when we identify the video game avatar as two different beings; both player and avatar. I will propose an answer to this, which has not so much to do with metaphysical identity as it has to do with phenomenological identity, which I find a lot more interesting, and possibly illuminating, than Olson's formalist approach, for the purpose of my investigation of *Mass Effect*.

The Playing Body: Not *where*, but *how* is the player present?

I now want to investigate the question of how the player is present in the game, and thus further the (post)phenomenological approach which largely informs my analysis.

This section will evaluate the possibility for adding a dimension to the distinction of real vs. digital space, and how we are present in the game. Video game researcher Paul Martin (2012) argues for a reconceptualization of Heidegger's concepts ready-at-hand and present-at-hand. To relate it to the avatar, Shepard is, as a technical body, not only ready-at-hand as our entry point for perception of the game world, ey is also an object, both visually due to *Mass Effect's* third person representation, but also because Shepard is a complex character with a past, present and future, a (player-influenced) personality and goals. In short, Shepard qualifies as a character, and is as such a self rather than the more abstract concept of a person (Zahavi, 2005, 107). Even in the cut scenes in the game where the player loses control of Shepard and is designated to simply observing, the identification with the avatar, as our coshaping half-us, half-other is not simply present-at-hand. We have taken Shepard where eyr is at that moment, and the connection is still intimately felt because of this function. On the

other hand, Martin correctly points out instances in which the ready-at-hand end of the spectrum dominates our relation with the avatar. As with Martin's example of 2005 game *Fahrenheit/Indogo Prophecy* (Atari, 2005), the minigames in *Mass Effect* serve the same purpose for our exposition. Throughout the *Mass Effect* games, there are several minigames in which the player-avatar may hack computer terminals to achieve a variety of goals.

In these instances, the avatar of Shepard withdraws from the player's perception both visually and auditorily, as the visuals shifts to the screen showing a «hacking» interface where certain procedures must be followed to complete the hack and achieve the objective (usually unlocking a door). In these minigames, although it's still the player-avatar entity that acts, the focus is on the interface alone, not least because it's also a static interface unaffected by movement and time exterior to the minigame.

Martin Burn and Schott (Martin 2012) when discussing how the player situates eyrself phenomenologically to the avatar, using players' description of their playthroughs of *Final Fantasy VII* (Square, 1997), giving attention to how the player ascribed agency interchangeably to “I” and “Cloud,” the avatar of that game. A similar tactic can give us some insight into players' experiences with the ME series. To again quote the forum user AdmiralCheez, ey states that

> “Shepard was a hero in her own right, but just as much, she was a little piece of me. It didn’t take long after that first walk down the Normandy’s bridge for me to realize that Shepard was the woman I’d always wanted to be: a strong, spunky, fearless, compassionate, charismatic ass-kicker that was human enough to be sympathetic and believable” (AdmiralCheez, 2012).

Shepard does not figure merely as a cipher, a function which is implied perspectivally in first-person shooters; there is a double sense of the relation to the avatar at work in *Mass Effect*, both as a representation of an ideal body-image, the possibility to live out an ideal self, and as «a hero in her own right»; a character whose identity is also separate from that of the player's. In terms of the *moral* embodiment, in which the player-avatar interacts socially with the other characters in the game, and in

making moral decisions, the identification with the avatar is particularly strong in *Mass Effect*: “I loved my crew. They managed to trick me into treating them like real people while I was playing” (AdmiralCheez, 2012). This is a description of what I see as significant emotional attachment, something further advanced with the option to form romantic relationships with squad mates, some of which can be cultivated throughout all three games. To relate an example of the latter, the character Tali'Zorah nar Rayya, a female crewmate of an alien race called “Quarians,” was not available as a love interest for the player-avatar in the first game. After considerable fan pressure (it has to be mentioned the fans of the character were divided on the issue of revealing her face), this was subsequently implemented by BioWare for the second and third games. Having worn a mask concealing her face throughout the game series, when her face was revealed in a picture given by her to Shepard in the third game, BioWare received a lot of animosity due to the picture being an altered version of a freely available stock image of an English model.

There is a chance not all fans would have been pleased even if her face was a true 3D modeling, but there are two mechanisms which illuminate why the doctored stock photo was received as badly as it was: Firstly, the fact that the photo was easily recognizable in its original, un-altered state, introduces something to the game universe which isn't proper to it. There is a certain tension between the quasi-otherness described in the concept of the alterity relation, and the knowledge of the player that the game universe is fictional. This opens up for a syntagmatic attitude, in which the player is “shook loose” from the coherence of the game universe, and is made privy to a look “behind the scenes.” The reason this attitude of looking behind the presented universe was made possible, however, was first and foremost that the doctoring of the photo could be seen as being hastily, or sloppily done. Had the craftsmanship been better, the players might have been content in fitting the picture into the coherence of the game universe, or if they didn't like it as such, let it be less of a disturbance.

The temporality of video games

Mass Effect is a largely intransient game, as opposed to a transient one, to employ concepts used by Espen Aarseth and appropriated by the field of video game studies (Eskelinen, 2001, 180-181). As an intransient game, the player controls the speed rather than the computer. This is common with roleplaying and first-person shooter games. This, in turn, connects to the distinction between event time and user time. To elaborate this distinction we can add two temporal qualifiers: Realtime and mimetic time (Aarseth et. al. 2003, 50-51). *Mass Effect* is a realtime game in that the gamer has the ability to act independently of the computer generated events; the only time this does not hold true is in cut scenes, which serve as an interjection of the cinematic medium to enhance the narrative aspect. The representation of time as mimetic refers to the fact that "actions in the game mimics corresponding actions in the real world" (Aarseth et. al. 2003, 51). The importance of this aspect of gaming can be related to Hansen's treatment of affectivity and the creation of bodily spacing and haptic vision, where the effacement of body image and body schema relies upon a felt correlate between the movement of the body and the visual mirroring on the screen.

The intentionality of Mass Effect

There can be directedness to technologies according to Ihde; a certain form of use is *encouraged* by specific technological artifacts; a technological intentionality (Verbeek, 2000, 114). What then, is the technological intentionality of Mass Effect, and can elucidating this explain its affectiveness?

Mass Effect can be played in different ways. In *Mass Effect 3* there are options made available at the creation of a new game, where one may choose between "Story", "Role Playing" or "Action" mode. The first makes combat easier, so players who are not adept at action oriented games or shooters may still manage to complete the game. It also caters to gamers who simply are not that interested in the action parts, and want them out of the way in between the moments in which the story and universe is unfolded through cut scenes, exploration and interaction with other characters.

The “Action” mode is the diametrical opposite. In this mode, conversation options are pre-selected for the player, no romantic relationships will be pursued, and conversation options are evenly distributed between Paragon and Renegade choices, which designate benevolent and ruthless choices respectively. The difficulty of the action is also increased, so “hardcore gamers,” meaning action enthusiasts with high skill level, can get more of a challenge. The middle option is the «Role Playing» mode, with a description underneath that reads “The traditional *Mass Effect* experience.” In being able to choose which mode to play in, the player attains some control over the level of information (speed, in relation to skill level). This allows for an individualized balance of event time and user time. The effect is that each player can select the option which yields eir desired level of transience, where the event time will not take too long, and the player dies, or becomes annoyed with having to use multiple tries to get through a combat event. In this way *Mass Effect* not only differs from a host of other video games that are intransient, it also shows why a narratological analysis cannot fully account for its temporality.

Narrative self-understanding

Introducing narrative

In this chapter I will try to gather some of the many pathways I have laid out in my analysis and discussion so far. As I have alluded to earlier, there is something which seems to be missing in Hansen's analysis of digital media. Not only is that true of the absence of a discussion of video games, it more importantly has to do with seeing how video games like *Mass Effect* might be shown to qualify for the functionalist definition Hansen ascribes so called “mixed reality” technologies. Furthermore, when looking to the controversy sparked by the ending to *Mass Effect 3*, and the reasons given by disappointed and angry gamers, something more than the bodily connection has to be accounted for. I will thus try to connect the *corpus ludens*, as the affective body, with the narrative concept of self as laid out in Zahavi's 2005 book *Subjectivity and Selfhood*. I will note here that

Zahavi's phenomenology in general does not share the aspirations of Hansen and Verbeek in which consciousness is discarded in favor of embodiment as source of intentionality, but the concept of narrative self-understanding on its own carries some explanatory potential and may be incorporated into the larger analysis on its own.

In investigating the concept of narrative self/understanding, some explanation might be added to why *Mass Effect* was received so well, and consequently why the ending achieved the opposite effect on players. Note however, that a Zahavi's concept of narrative self-understanding is by no means meant to account for all forms of self-understanding there are. Zahavi's explanation on self-understanding is merely on way of approaching self-understanding, and the reason I have chosen to focus on this explanation is to test its correlate ability with the narratively structuring of *Mass Effect*.

I will start out by giving a brief discussion of the players' connection and identification with the avatar, and the relation to non-player characters. By identification with the avatar, I will differentiate between two kinds, one describing the player's sense of agency within the game world as being carried out by the avatar, and the other aiming at describing the somewhat more elusive sense of the player establishing more of de-facto identity of which the avatar is part.

Self and Narrative in *Mass Effect*

There are several reasons why *Mass Effect* manages to invoke affect. Our corporeal connection with the avatar is one. On the basis of this bodily connection I wish to highlight two effects, which stem from our relationship with the avatar, and what can only be explained as the gamer-avatar's relation with non-player characters. These effects are reliant upon their technological support. Examples could be the current state of computer hardware and the ability of game engines to render a certain level of graphical quality. Facial animation software is another cogent example.

As has already been explored, some players connect emotionally with their avatars by

externalizing their body image to that of the avatar. The visual connection should therefore not be avoided by fear of appearing oculacentrist. Rather, the blurred identity of player and avatar through a physical externalization of the body image seems to reinforce the (limited) affectivity of externalizing the body schema, which can be said to occur in third-person games in particular.

This synergetic connection arises when there is something at stake, when the gamer not only feels eirself being threatened with defeat, but also in respect to their avatar's success or failing. In a game where the player cannot easily identify with or care about the avatar, such as with overly cartoonish figures, it's fair to assume the fear of seeing the avatar fail is less than in *Mass Effect,* where the avatar becomes a combination of pre-scripted attributes and the gamer's actions, forming a history both make for themselves and the other. That the gamer and Shepard both take part in creating Shepard's story should be and unproblematic assumption, but how does it function the other way around? How does the player-avatar create the gamer's story, and why is this important to understand? To answer this, I will turn to Zahavi and his work on narrative self-understanding.

Narrative self-understanding

Zahavi argues that an awareness of first-personal awareness of one's self is inadequate to account for self-understanding (Zahavi 2005, 107). Rather, what we need in addition to this minimalist definition of a self is the story of that self. To again cite the words of philosopher Ronald McIntyre quoted at the opening of this paper, «stories are lived before they are told – except in the case of fiction» (McIntyre in Zahavi 2005, 107). What is being told, then, is the story of who one is, in the case of the narrative self. To be a character, one has to have a history, a his-*story*, or her-*story.* In keeping with the gender neutral pronouns chosen for this paper, the existence of an eir-*story* is necessary for the existence of a self. If we look to McIntyre's statement again, it can inform our understanding of what is so singularly affective about *Mass Effect* and games like it; they are neither solely fiction, nor unmediated lived experience. *Mass Effect* thus confronts the player with not so much a problem, as a task of re-

conceptualizing the self, the formation of its narrative, as well as what role the avatar plays in this landscape. The affectivity of the avatar and the companions Shepard has in *Mass Effect,* is constituted by being perceived by the player as agents acting in the story unfolding through the praxis of playing. This leads us to the conclusion, where I will try to gather the discussions throughout this paper and merge them in the concept of ludic self-emergence.

Part IIII

Conclusion: Ludic self-emergence

In an interview, BioWare co-founders Ray Muzyka and Greg Zeschuk describes what I identify as the quasi-otherness of characters in third-person roleplaying games as fundamental to establishing the player's emotional investment. The companion characters won't just rely events and your choices "how they happened," the characters are written to provide an individualized perspective, and will react to the player-avatar choices in ways which reflect certain attitudes and sets of beliefs (CriticalPathProject, 2012). See *Figure 3* for a representation of some of the companions in *Mass Effect 3.*

Given the composite intentionality of the player-avatar, what is at stake in *Mass Effect* is more than being witness to a story unfolding. In looking to Hansen's account, the player is experiencing a novel form of embodiment though interacting with digital media, which bears with it an affectivity that is fundamental to the actualization of human potentiality of experience. Additionally, when taking account of Zahavi's concept of narrative self-understanding, Shepard's story becomes that of the player, and vice versa. Put differently, we could say with Verbeek's concept of composite intentionality that the player-avatar emerges as an entity in which the human and technological share in agency is hard to distinguish. This relation therefore bears with a deep immersion, which is heightened by the player-avatar having to make moral choices that have an effect on both the game

universe and the identity of the player-avatar as it figures as a character in that universe.

Going back to Hansen, the ludic self-emergence of the player is exteriorized in the technical support of the computer game. With its physical support in the save file, in which the player-avatar's co-lived story is stored, identity itself can be seen to be exteriorized, which would be harmonious with a synthetic reading of Stiegler and Zahavi. Exteriorization of memory through technics is what constitutes us as human (as cyborg), and the memories we structure into the story of our life, our narrative self-understanding, is what constitutes the coherent self by which we understand *who* we are. To make a strong claim, *Mass Effect* is affective precisely because it *lets us become who we are*. This is what I propose to be ludic self-emergence, the way in which players might be influenced through the practice of playing video games, a practice by which self-understanding is challenged in terms of relying on felt agency and in having a shared story with the avatar as both a quasi-other and part of a composite intentionality. The way this is achieved is, as has been argued, through bodily, tactily, interaction with the computer interface, by the human body functioning as a center of indetermination, and through the player experiencing a narrative unfolding in which ey have a shared agency with the avatar, influenced by this cyborg entity’s movement and choices.

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Figures used

Figure 1, *Mass Effect 2* combat interface (*EA*, 2010). The perspectival distance to the avatar varies slightly in the *Mass Effect* games, shifting from the currently seen over-the-shoulder perspective to the avatar's full body being in view at the center of the screen.

Figure 2, *Mass Effect 2* character customization interface (*EA*, 2012)

Figure 3, companions selectable for a mission in *Mass Effect 3* (*EA*, 2012)